Unlucky Lara

Lara thinks that she is unlucky.

Every time Lara goes to the toilet at school, she uses the same cubicle. She believes that each time she goes to the toilet, and uses her 'favourite' cubicle, there is no toilet paper. It seems to her that this happens to her more often than it happens to her friends.

Lara's friend Tiffany supposes that maybe Lara uses the toilet cubicle at school that is the most frequently used, so the toilet paper runs out faster. Tiffany likes to use the cubicle furthest away from the toilet block door, because she thinks it's the least used. Lara admits she uses the toilet cubicle closest to the door, because it's the closest.

1. Write down some ideas that will allow Lara and Tiffany to figure out which toilet cubicle is the most used.

2. Before collecting any data, it is important to develop a **question** or **hypothesis** to investigate. Write a question or hypothesis for Lara and Tiffany's investigation.

Cubicle	Frequency
1st (closest to the toilet block door)	𝍸 I 𝍸 I
2nd	𝍸 I
3rd	I
4th (furthest from the toilet block door)	

Method:

Lara and Tiffany decide to conduct a survey. Along with three friends, Lara and Tiffany make up a sample of 5 female students. They decide to survey their use of the toilets for one school day. This table presents the results of the survey.

3. What are the **results** from Lara and Tiffany's survey? Write a paragraph describing the results.

4. **Discuss** the ways that Lara and Tiffany's survey can support Lara's theory that she is unlucky, and Tiffany's theory on toilet paper usage.

5. Based on the results of Lara and Tiffany's survey, which cubicle would you use and why? Write a conclusion for your question/hypothesis (Q2) based on your results (Q3) and discussion (Q4).

Extension:

6. Conduct your own survey to investigate Lara and Tiffany's theories.

Don't forget to follow the stages of an investigation: Question/hypothesis, Method, Results, Discussion and Conclusion. Or you can use the statistical investigation cycle of Problem, Plan, Data, Analysis, and Conclusion. www.censusatschool.org.nz/resources/poster/